

REMARKS

The indication that claims 6-7, 12, 17-18, and 20-23 include patentable subject matter is acknowledged with thanks. In reliance thereon, the claims have been amended solely as to form.

The Official Action objects to the form of claims 6-7, 10, 12, 17-18, and 20-23. These claims have been amended and reconsideration and withdrawal of the objection are respectfully requested.

Claims 1-5 and 8-11 were rejected as anticipated by TAKAHASHI 5,331,572 and claims 13-14 were rejected as unpatentable over TAKAHASHI in view of KANEKO 2001/0025364. Claim 1 has been amended and reconsideration and withdrawal of the rejection are respectfully requested.

Claim 1 defines a first hard-macro arranged on a semiconductor chip and constituting a part of a semiconductor integrated circuit that includes plural blocks and plural hard-macros other than the first hard-macro that are connected to each other with signal wires. At least one of the signal wires passes through the first hard-macro starting at a first outer edge of the first hard-macro and terminating at a second outer edge of the first hard-macro intersecting with the first outer edge. Further, the at least one signal wire is not a power supply line through which power is supplied from a power supply.

TAKAHASHI does not disclose either this hard-macro or the signal wire (not a power-supply line) passing through this hard-macro. TAKAHASHI describes the device in Figures 17-20 as including macro-blocks 35, input/output blocks 36, and corner blocks 37 serving as input/output blocks (column 1, lines 31-47). Clearly, TAKAHASHI knows a macro when he sees one (macro-block 35); and he is careful to distinguish macro-block 35 from corner blocks 37. If corner blocks 37 were macros, TAKASHASHI would have described them as such, and since he does not describe them as macros one of skill in the art would not assume that they are.

Further, input/output blocks do not typically have a program function while macros do. A block arranged for input/output is subjected to different design criteria than a macro and one of skill in the art would not presume an input/output block would be a macro.

TAKAHASHI also does not disclose a "signal" line passing through the hard-macro as claimed in claim 1, where this line is explicitly defined as not a power-supply line. TAKAHASHI describe "power supply wiring patterns 41" passing through the corner block 37 (Figure 19). The passage of a power supply wiring pattern through the corner block presents electrical problems that are different from those faced by one of skill in the art attempting to pass a signal wire through a hard-macro. Indeed, it is apparent from Figure 17 that TAKAHASHI does not even attempt to pass a wire at all through the macro 35. In

TAKAHASHI, the only wires that pass through a block are power supply wires through the input/output blocks.

Accordingly, TAKAHASHI does not disclose the hard-wire macro and signal wire (that is not a power-supply line) passing therethrough as in claim 1, and claims 1-5 and 8-11 avoid the rejection under §102.

KANEKO does not make up for the shortcomings of TAKAHASHI noted above and claims 13-14 avoid the rejection under §103.

New claims 24-26 have been added and further provide that the at least one wire is not a power-supply line. This wire is not disclosed in the applied art and claims 24-26 are allowable for this additional reason.

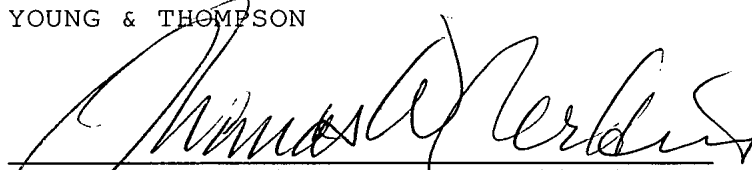
In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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